

REMARKS

Claims 1-10 and 12-24 continue pending in this patent application. Claims 8-10, drawn to a non-elected species, stand withdrawn from consideration under 37 CFR § 1.142(b).

In this paper, claims 1, 2, 3 and 12 have been amended. The substantive amendments to the claims made herein are argued below. In view of the substantive amendments and arguments presented herein, Applicant submits that it would not be proper to make the next Office Action final.

PRIOR ART REJECTION I

Claims 1-7, 16-20 and 24 were rejected under 35 USC § 103(a) as being unpatentable over US 6623378 B2 (Beach et al.) in view of US 6645086 B1 (Chen), US 6332847 B2 (Murphy et al.), US 1269745 (Robertson) and JP 6-190088 (per the Examiner, "Kobayashi"). Applicant traverses this rejection insofar as it might be deemed applicable to any of claims 1-7, 16-20 and 24 as now presented.

In this paper Applicant has amended independent claims 1, 2, 3 and 12 to recite a range length for the slot in the sole plate in terms of the length of the bent line along which the face plate and the sole plate are connected. Non-limiting editorial amendments have also been made to claims 1, 2, 3 and 12.

In all of the disclosed embodiments of the Beach et al. club head, the hosel 16 is formed integrally with the strike plate 12. Despite this consistent disclosure, the Examiner states that Beach et al. "does not limit the hosel to be connected at the striking face." Applicant submits that the Beach et al. disclosure provides no basis whatsoever for the Examiner's contention. *If this rejection is going to be maintained, Applicant asks that the Examiner specifically identify the basis for the statement that Beach et al. "does not limit the hosel to be connected at the striking face."*

The Examiner acknowledges that "Beach et al. does not show the sole plate width decreasing toward the face plate." The Examiner cites Chen as disclosing a club head "wherein the sole plate is shown decreasing in width toward the lower edge of the face plate." *The Examiner's statement is factually incorrect.* Fig. 3 of Chen shows the sole plate *increasing* in

width toward the lower edge of the face plate. The Examiner adds, "One of ordinary skill in the art would have found it obvious to have the width of the sole plate of any relationship so long as the durability of the club head is improved." Applicant asks that the Examiner identify prior art that supports this conclusion.

The Examiner cites Murphy et al. for its disclosure of a club head in which the hosel is connected only to the sole plate of a hollow club head and contends that the Murphy et al. teachings would have made obvious a modification of the Beach et al. club head in which the hosel is connected only to the sole plate. Applicant submits that the Examiner's proposed modification of the Beach et al. club head is at odds with the clear and consistent disclosure in Beach et al. of having the hosel 16 formed integrally with the strike plate 12.

The Examiner acknowledges that "Beach et al. does not disclose the sole varying in thickness. The Examiner cites Robertson as disclosing "a club head having a sole plate in which the sole plate is thinnest at the front of the club head and thickest at the rear of the club head" and contends that the teachings in Robertson would have made obvious a modification of the Beach et al. club head in which the sole plate varies in thickness. Robertson discloses a varying thickness sole plate fastened by screws to the bottom of a solid wood club head. Applicant submits that the Robertson disclosure would not find obvious application to a technologically advanced metal/resin hollow club head such as the one disclosed by Beach et al.

The Examiner implicitly acknowledges that the club head disclosed by Beach et al. does not have a slot provided along the front end of the sole plate as required by Applicant's claims. The Examiner cites Kobayashi for its disclosure of a club head with slots along the front end of the sole. From the statement of the rejection, it is apparent that the Examiner regards the teachings in Kobayashi as making obvious a modification of the Beach et al. club head in which it has slots along the front end of the sole.

As explained in the specification of this application, by providing the slots in the sole plate as claimed, it is possible to increase dynamically the loft angle at the time of hitting a ball, and accordingly, the launching angle of the ball can be increased. These valuable attributes are not realized in club heads constructed according to the teachings in the prior art. The claimed range of the length of the slot in the sole plate vis-à-vis the length of the bent line along which

the face plate and the sole plate are connected enables the advantages of the slot to be realized without compromising the durability of the joint between the face plate as the sole plate, as explained in the specification on page 6, lines 17-23.

As shown in Figs.1-3 of Kobayashi, a plurality of rows of slots 19 are provided in the top, the toe side and the sole of the club head. As shown in Fig.5, in each of the rows, the slots 19 having a length "a" are arranged at intervals "b". In table 1 on page 5 of Kobayashi, length "a" and interval "b" are as follows ("n" is the number of the rows, and "m" is the number of the slots per row):

CASE 1: $a=22\text{mm}$, $b=3\text{mm}$, $a/(a+b)=22/25=0.88$ (88%)

CASE 2-4: $a=20\text{mm}$, $b=5\text{mm}$, $a/(a+b)=20/25=0.80$ (80%)

As shown in table 1, the total length of the slots is obviously more than 70%. From the foregoing analysis of the disclosure in Kobayashi, it is evident that that no reasonable application of the teachings in Kobayashi to the Beach et al. club head could yield a club head with slots meeting the requirements of Applicant's claims.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in Beach et al., Chen, Murphy et al., Robertson and Kobayashi can properly serve as a basis for rejecting amended independent claims 1, 2 and 3 or dependent claims 4-7, 16-20 and 24 under 35 USC § 103(a).

PRIOR ART REJECTION II

Claims 13-15 and 21-23 were rejected under 35 USC § 103(a) as being unpatentable over Beach et al. in view of Chen, Murphy et al., Robertson and Kobayashi and further in view of JP 9-253242 (per the Examiner, "Yamaguchi"). Applicant traverses this rejection insofar as it might be deemed applicable to any of claims 13-15 and 21-23 as now presented.

The Examiner cites Yamaguchi for its disclosure of a club head having a "specific gravity depth" of 25-50 mm and a sweet spot with a location related to the height of the club face. The Examiner contends that it would have been obvious to modify the proposed Beach et al.-Chen-Murphy et al.-Robertson-Kobayashi club head "to have a specific gravity depth and sweet spot height of that taught by Yamaguchi in order to improve engine performance" [sic].

Applicant observes that the Yamaguchi disclosure cannot remedy deficiencies in the Beach et al., Chen, Murphy et al., Robertson and Kobayashi disclosures vis-à-vis the clear requirements of parent claims 1-3 and 12, as pointed out above. Therefore, no reasonable combination of the teachings in Beach et al., Chen, Murphy et al., Robertson, Kobayashi and Yamaguchi could yield a club head meeting the requirements of Applicant's claims.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in Beach et al., Chen, Murphy et al., Robertson, Kobayashi and Yamaguchi can properly serve as a basis for rejecting claims 13-15 and 21-23, as now presented, under 35 USC § 103(a).

PRIOR ART REJECTION III

Claims 12 and 17-19 were rejected under 35 USC § 103(a) as being unpatentable over Beach et al. in view of Kobayashi. Applicant traverses this rejection insofar as it might be deemed applicable to any of claims 12 and 17-19 as now presented.

Like claims 1, 2 and 3, claim 12 has been amended to recite a range length for the slot (or slots) in the sole plate in terms of the length of the bent line along which the face plate and the sole plate are connected.

The disclosures in Beach et al. and Kobayashi are discussed above. For reasons provided in the discussion above, Applicant submits that no reasonable application of the teachings in Kobayashi to the Beach et al. club head could yield a club head with slots meeting the requirements of Applicant's amended independent claims 3 and 12.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in Beach et al. and Kobayashi can properly serve as a basis for rejecting amended independent claim 12 or dependent claims 17-19 under 35 USC § 103(a).

PRIOR ART REJECTION IV

Claims 21-23 were rejected under 35 USC § 103(a) as being unpatentable over Beach et al. in view of Kobayashi and further in view of Yamaguchi. Applicant traverses this rejection insofar as it might be deemed applicable to any of claims 21-23 as now presented.

The disclosures in Beach et al., Kobayashi and Yamaguchi are discussed above. For reasons provided in the discussion above, Applicant submits that no reasonable combination of the teachings in Beach et al., Kobayashi and Yamaguchi could yield a club head meeting the requirements of Applicant's amended parent claims 3 and 12.

In view of the foregoing observations, Applicant submits that no reasonable combination of the disclosures in Beach et al., Kobayashi and Yamaguchi can properly serve as a basis for rejecting claims 21-23, as now presented, under 35 USC § 103(a).

CLAIMS TO NON-ELECTED EMBODIMENTS

In the discussions above, Applicant has shown that claims 1-7 and 12-24 are allowable. Claim 1 is generic to the non-elected species illustrated in Figs. 9 and 10 and the species illustrated in Fig. 12. Claims 2 and 3 are generic to all of the species identified by the Examiner in the Requirement for Restriction dated July 20, 2005. In view of the allowability of claims 1, 2 and 3, Applicant submits that claims 8-10 should now be recognized as allowable along with their parent claims under 37 CFR § 1.141(a).

CONCLUSION

In view of the amendments, observations and arguments presented herein, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections stated in the outstanding Office Action and recognize all of the pending claims as allowable.

If unresolved matters remain in this application, the Examiner is invited to contact Frederick R. Handren, Reg. No. 32,874, at the telephone number provided below, so that these matters can be addressed and resolved expeditiously.

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Amendment dated January 7, 2009
After Final Office Action of October 7, 2008

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If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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